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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/648,329      08/27/2003      Sung-Ro Go      1293.1802      5351

21171      7590      09/21/2007  
STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER
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GIESY, ADAM

ART UNIT	PAPER NUMBER
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2627

MAIL DATE	DELIVERY MODE
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09/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/648,329	Applicant(s) GO, SUNG-RO	
	Examiner Adam R. Giesy	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 9, 11 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9, 11 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                                  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

## DETAILED ACTION

### *Response to Amendment*

1. The Examiner, upon further consideration, hereby withdraws the finality of the Final Office Action, mailed on 2/28/2007 as agreed upon in the telephonic Interview on March 20, 2007.

The latest claim set including all amendments, submitted on 2/6/2007, will now be prosecuted in light of the withdrawal of the last Final Office Action as stated above.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 9, 11, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamaru et al. (hereinafter Tamaru – US Pat. No. 6,894,967 B2).

Regarding claim 1, Tamaru discloses a disc drive which records data on a disc, the disc drive comprising: a clock generator which generates a clock signal that is synchronized with a transmission speed of a received signal (Figure 3, elements 100, 104, and 106; see also column 11, line 65 thru column 12, line 7); a pickup unit which records recording data corresponding to the received signal on the disc (Figure 3, element 103; see also column 12, lines 16-19); a recording processing unit which converts the received signal into the recording data by synchronizing with a clock signal generated from the clock generator into recording data and provides the converted

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recording data to the pickup unit (Figure 3, elements 109 and 110); a spindle motor which rotates the disc (element 102); a spindle motor driving unit which controls a rotation speed of the spindle motor by using the clock signal generated from the clock generator (Figure 3, elements 104 and 107; see also column 11, line 67 thru column 12, line 4).

Tamaru discloses the claimed invention except for a channel receiver. It would have been an obvious matter of design choice to use any external device which can create a data signal, including a channel receiver since the applicant has not disclosed that using only a channel receiver to create and output the data signal solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any external device which can create and transmit an encodable data signal.

Regarding claim 2, Tamaru discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the disc drive further comprises a decoder which detects an identifying signal indicating a transmission speed of the received signal (Figure 3, element 104 – note that the frequency of the wobble signal will vary dependent upon the recording/reproducing speed, therefore the wobble can inherently be used to determine transmission speed), provides the detected identifying signal to the clock generator (see Figure 3, element 104 – the wobble signal is inputted into element 104), transmits the received signal to the recording processing unit, and the clock generator generates the clock signal that is synchronized with the identifying

signal (Figure 3, element 104 – note that element 104 produces a secondary ATIP-CLK signal as seen in Figure 3 which is synchronized with the ATIP and wobble signals).

Regarding claim 3, Tamaru discloses all of the limitations of claim 2 as discussed in the claim 2 rejection above and further that the identifying signal is a periodic signal (see column 11, lines 59-61 – note that the identifying signal is read on by the wobble signal since the wobble signal is periodic).

Regarding claim 4, Tamaru discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the recording processing unit comprises an encoder which encodes the received signal (Figure 3, elements 109 and 110; see also column 12, lines 12-14).

Regarding claim 5, Tamaru discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the clock generator comprises a phase locked loop circuit (element 104 produces a secondary ATIP-CLK signal as seen in Figure 3; element 104 is also comprised of a PLL circuit as displayed in Figure 3).

Regarding claim 9, Tamaru discloses a disc drive which records data on a disc, the disc drive comprising: a pickup unit which records recording data corresponding to a received signal on the disc (Figure 3, element 103); a recording processing unit which converts the received signal into the recording data by synchronizing with a transmission speed of the received signal and provides the recording data to the pickup unit (elements 109 and 110); a decoder which detects an identifying signal capable of indicating the transmission speed of the received signal and transmits the identifying signal to the recording processing unit (100 and 104); a spindle motor which rotates the

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disc (102); and a spindle motor driving unit which controls a rotation speed of the spindle motor by synchronizing with the identifying signal (elements 104 and 107; see also column 11, line 67 thru column 12, line 4).

Tamaru discloses the claimed invention except for a channel receiver. It would have been an obvious matter of design choice to use any external device which can create a data signal, including a channel receiver since the applicant has not disclosed that using only a channel receiver to create and output the data signal solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any external device which can create and transmit an encodable data signal.

Regarding claim 11, Tamaru discloses all of the limitations of claim 10 as discussed in the claim 10 rejection above and further that the identifying signal is a periodic signal (see column 11, lines 59-61 – note that the identifying signal is read on by the wobble signal since the wobble signal is periodic).

Regarding claim 15, Tamaru discloses a method of controlling a recording speed of a disc drive capable of recording data on a disc, comprising: generating a clock signal that is synchronized with a transmission speed of a received signal (see column 11, line 65 thru column 12, line 7); converting the received signal into recording data that is to be recorded on the disc by synchronizing with the clock signal (see column 12, lines 8-19); recording the converted recording data on the disc (see column 12, lines 16-19); and controlling a rotation speed of a spindle motor that rotates the disc by synchronizing with the clock signal (see column 11, line 67 thru column 12, line 4).

Tamaru discloses the claimed invention except for a channel receiver. It would have been an obvious matter of design choice to use any external device which can create a data signal, including a channel receiver since the applicant has not disclosed that using only a channel receiver to create and output the data signal solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any external device which can create and transmit an encodable data signal.

Regarding claim 16, Tamaru discloses all of the limitations of claim 15 as discussed in the claim 15 rejection above and further that the generating the clock signal comprises: detecting an identifying signal capable of indicating the transmission speed of the received signal (Figure 3, element 104 – note that the frequency of the wobble signal will vary dependent upon the recording/reproducing speed, therefore the wobble can inherently be used to determine transmission speed); and generating a clock signal that is synchronized with the identifying signal (Figure 3, element 104 – note that element 104 produces a secondary ATIP-CLK signal as seen in Figure 3 which is synchronized with the ATIP and wobble signals).

Regarding claim 17, Tamaru discloses all of the limitations of claim 16 as discussed in the claim 16 rejection above and further that the identifying signal is a periodic signal (see column 11, lines 59-61 – note that the identifying signal is read on by the wobble signal since the wobble signal is periodic).

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**Response to Arguments**

4. Applicant's arguments with respect to claims 1, 9, and 15 are have been considered but are moot in view of the new ground(s) of rejection.

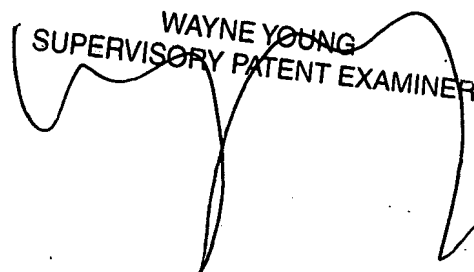
**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (571) 272-7555. The examiner can normally be reached on 8:00am- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne R. Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARG 9/5/2007



WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER